

For Research Use Only

# PHGDH Monoclonal antibody

Catalog Number: 67591-1-Ig 2 Publications



## Basic Information

<b>Catalog Number:</b> 67591-1-Ig	<b>GenBank Accession Number:</b> BC000303	<b>Purification Method:</b> Protein G purification
<b>Concentration:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 26227	<b>CloneNo.:</b> 1E8B8
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O43175	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG1	<b>Full Name:</b> phosphoglycerate dehydrogenase	IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
<b>Immunogen Catalog Number:</b> AG6877	<b>Calculated MW:</b> 57 kDa	IHC 1:2000-1:8000
	<b>Observed MW:</b> 57 kDa	IF/ICC 1:400-1:1600

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IP, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB	<b>WB :</b> HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells
<b>Species Specificity:</b> human, mouse, rat	<b>IP :</b> HeLa cells,
<b>Cited Species:</b> human, mouse	<b>IHC :</b> human urothelial carcinoma tissue,
	<b>IF/ICC :</b> HeLa cells,

**Note-IHC:** suggested antigen retrieval with **TE buffer pH 9.0**; (\*) Alternatively, antigen retrieval may be performed with **citrate buffer pH 6.0**

## Background Information

PHGDH(D-3-phosphoglycerate dehydrogenase) is also named as 3-PGDH, PGDH3 and belongs to the D-isomer specific 2-hydroxyacid dehydrogenase family. It catalyzes the transition of 3-phosphoglycerate into 3-phosphohydroxypyruvate, which is the first and rate-limiting step in the phosphorylated pathway of serine biosynthesis, using NAD<sup>+</sup>/NADH as a cofactor. 3-PGDH deficiency is a rare recessive inborn error in the biosynthesis of the amino acid L-serine characterized clinically by congenital microcephaly, psychomotor retardation, and intractable seizures(PMID:19235232).

## Notable Publications

Author	Pubmed ID	Journal	Application
Youming Zhu	35081364	Mol Cell	WB
Xinhui Lu	38159553	Int Immunopharmacol	WB

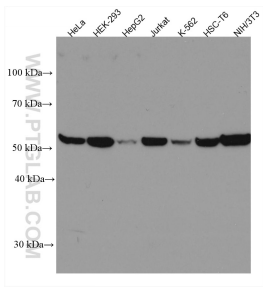
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

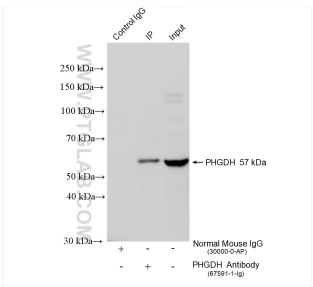
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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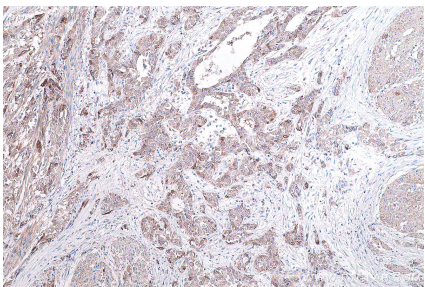
Selected Validation Data



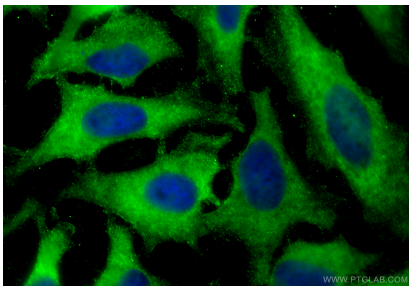
Various lysates were subjected to SDS PAGE followed by western blot with 67591-1-Ig (PHGDH antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



IP result of anti-PHGDH (IP:67591-1-Ig, 4ug; Detection:67591-1-Ig 1:3000) with HeLa cells lysate 980 ug.



Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 67591-1-Ig (PHGDH antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using PHGDH antibody (67591-1-Ig, Clone: 1E8B8 ) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).